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09/289,601	04/12/1999	SHINJI KONISHI	Q53957	8834

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EXAMINER
TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/289,601	Applicant(s) KONISHI, SHINJI	
	Examiner Douglas Q. Tran	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *9* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1- 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fujita et al. (US Patent No. 6,055,361) and McCormick et al. (US Patent No. 5,706,411).

As to claim 1, Fujita teaches:

a host computer (10 in fig. 1) and a printer (20 in fig. 1) for receiving print data from the host computer and printing based on the print data;

print job data processing means (i.e., command processor 23 in fig. 1) for interpreting the print job data comprises the print data (i.e. image data) and reply information (i.e., command) (col. 5, 10-18, col. 13, lines 59-67, col. 14, lines 47-55), detecting and returning the reply information to a predetermined destination which is external to the printer (col. 2, lines 55-67);

print control means (24 in fig. 1) for printing based on interpretation of the print data processing means (col. 5, lines 16-18); and

job processing state monitor means (25 in fig. 1), contained in the printer, for monitoring a processing state of the print job data based on the reply information returned from the print data processing means (col. 6, lines 3-5, 24-28).

Although Fujita does not teaches print data processing means for detecting the reply information and returning the reply information to a predetermined destination, such limitations are merely a matter of design choice and would have been obvious in the system of Fujita. Fujita teaches another processor such as the urgent command processor (42 in fig. 1) for performing the same function as indicated above (col. 6, lines 24-28). Therefore, using one processor for performing a plurality of functions in Fujita would have been a matter of obvious design choice to one of ordinary skill in the art.

Although Fujita teaches the host computer (from 10 in fig. 1) for generating print data and for issuing reply information (i.e., request command or status inquiry command in fig. 8) at a predetermined position of print job data containing the print data (col. 5, lines 5-9 and 61-63), Fujita does not mention means within the host for generating print data and issuing request status commands.

McCormick teaches means (i.e., windows print manager) for generating print data and means (i.e., control printing 1601 in fig. 16) for issuing the request status commands (col. 8, lines 20-32).

It would have been obvious to have modified the system of Fujita for generating print data and status request command from specified units from the host computer as taught by McCormick. The suggestion for modifying the system of Fujita can be reasoned by one of ordinary skill in the art as set forth by McCormick because both of the printing systems of Fujita and McCormick are related with the exchange of data between the host computer and the printer and McCormick provides the host computer to generate print job including status request

command and receive the status information from the printer to the user so that the user easily keep tracks any status of the printer.

As to claim 2, Fujita teaches the print job data processing means returns the reply information to the predetermined destination after completion of processing of the print data (col. 5, line 64 through col. 6, line 5).

As to claim 3, Fujita teaches if the reply information is related to print data concerning print operation, the print job data processing means checks execution of the print data concerning print operation before returning the reply information to the predetermined destination (col. 5, line 64 through col. 6, line 5).

As to claim 4, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein the print job data processing means returns timing specified on the timing specification information (col. 1, lines 48-50).

As to claim 5, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print data processing means returns the reply information to the predetermined destination after completion of processing the print data related to the reply information (col. 1, lines 48-50).

As to claim 6, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print data processing means returns the reply information to the predetermined destination after

checking processing of the print data concerning print operation related to the reply information (col. 5, line 64 through col. 6, line 5).

As to claim 7, Fujita teaches the reply information issuance means issues the reply information and the timing specification information so that the print data is placed between the reply information and the timing specification information. (col. 5, line 64 through col. 6, line 5).

As to claim 8, Fujita teaches the reply information issuance means issues the timing specification information and the reply information so that the timing specification information, the print data, and the reply information are processed by the print data processing means in this order (col. 5, line 64 through col. 6, line 5).

As to claim 9, Fujita teaches the print data concerning print operation is at least any one of a paper feed instruction, a paper eject instruction, a page feed instruction, a line feed instruction, and a carriage return instruction (col. 5, 19-23; note: the printer command should include these above features).

As to claim 10, Fujita teaches reply information detection means for detecting the reply information returned from the print data processing means and sending the detected reply information to the job processing state monitor means (from 23 to 26 in fig. 1).

As to claim 11, due to the similarity of this claim to a portion of claim 1, this claim is rejected as the reasons applied to claim 1.

As to claims 12-13, and 15-18, due to the similarities of these claims to those of claims 2-5, and 7-8, these claims are rejected as the reasons applied to claims 2-5 and 7-8.

As to claim 14, Fujita teaches the print data concerning print operation is at least any one of a paper feed instruction, a paper eject instruction, a page feed instruction, a line feed instruction and a carriage return instruction (col. 5, lines 24-40).

As to claim 19, Fujita teaches the reception means, the print data processing means, and the print control means can operate in parallel (see fig. 1).

As to claim 20, McCormick teaches

means (i.e., windows print manager) for generating print data and means (i.e., control printing 1601 in fig. 16) for issuing the request status commands (col. 8, lines 20-32).

a job processing state monitor function (1601 in fig. 16) of monitoring a processing state of the print job data based on the reply information returned from the printer in a format that can be read and understood by a computer (col. 8, lines 50-53).

However, McCormick does not teach reply information at a predetermined position of print job data containing the print data.

Fujita teaches reply information (i.e., request command or status inquiry command in fig. 8) at a predetermined position of print job data containing the print data (col. 5, lines 5-9 and 61-63).

It would have been obvious to have modified the system of McCormick for locating the reply information at a predetermined position of the print job containing the print data as taught by Fujita. The suggestion for modifying the system of McCormick can be reasoned by one of ordinary skill in the art as set forth by Fujita because Fujita provides the host computer to generate print job including status request command and receive the status information from the printer to the user so that the user easily keep tracks any status of the printer.

As to claim 21, McCormick teaches the reply information issuance function issues timing specification for specifying return timing of the reply information in addition to the reply information (col. 10, lines 36-46).

As to claim 22, McCormick teaches reply information detection (1603 in fig. 16) function of detecting the reply information returned from the printer and sending the detected reply information to the job processing state monitor function (1601 in fig. 16).

As to claim 23, due to the similarity of this claim to that of the feature of the combination of Fujita and McCormick as in claim 1, this claim is rejected as the reasons applied to claim 1 except for a monitoring processor which is external to the printer, such limitation is merely a matter of design choice and would have been obvious in the system of Fujita. Fujita teaches that a monitoring processor (23 in fig. 20) is associated with page monitor 60 (fig. 20) detects the status of each page and then notifies to the host via interface (21 in fig. 20). If a monitoring processor, which is external to the printer, receives the status information from the printer, the result is the same with the teaching of Fujita. Therefore, the monitoring processor being external to the printer in Fujita would have been a matter of obvious design choice to one of ordinary skill in the art.

As to claim 24, the combination of Fujita and McCormick teaches instruction for instructing the apparatus claim 11 as indicated above.

Response to Arguments and Amendment

Applicant's arguments filed 12/21/01 have been fully considered but they are not persuasive.

Applicant asserted in page 8 " Fujita and McCormick do not disclose, teach or suggest all of the features recited in claim 1. For example, claim 1 comprises print data generation means and reply information issuance means. The print data generation means is contained in a host computer and generates print data. The reply information issuance means generates print job data that includes reply information located in the print data at a predetermined position. Also, the print job is transmitted to a printer. In addition, claim 1 contains print job data processing means which returns the reply information to a destination that is external to the printer.". In reply, Fujita teaches that since the printer receives the print job data including the print data and reply information (col. 13, lines 59-67 and col. 14, lines 44-63), there inherently are means for generating print data, means for generating print job data that includes reply information located in the print data at a predetermined position. However, the Examiner still cite another art of McCormick for teaching means (i.e., windows print manager) for generating print data and means (i.e., control printing 1601 in fig. 16) for issuing the request status commands (col. 8, lines 20-32).

Applicant asserted in page 9 " As noted above, in claim 1, reply information is supplied to the printer, and the printer subsequently outputs the reply information to a destination that is external to the printer. On the other hand, in Fujita, a status inquiry command is supplied to the printer 20, and the printer 20 subsequently outputs separate and independent status information to a destination that is external to the printer 20. Accordingly, the disclosed status inquiry command or the status information does not suggest the reply information recited in claim1.". In reply, as in the limitation of claim 1 states: "print job data processing means, contained in the printer, for interpreting the print job data, detecting the reply information form the print job data,

and returning the reply information to a predetermined destination which is external to the printer." , Fujita teaches the same concept with the above limitation (col. 2, lines 40-42; 61-65 and col. 14, lines 47-60)

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

Examiner's Remarks

Lung et al. (U.S. Patent No. 5,533,175) disclose The controller includes a dispatcher for keeping track of sequential print data received from the host computer and separating the print data into raw image data and print commands, a CPU which executes the print commands to instruct the printer to start or stop a printing job, report printer status to the host computer, manage printer configuration, etc.

Danknick (U.S. Patent No. 6,021,429) discloses Print data and printer status commands are fed to printer interface card 29 from NEB 2 via peripheral connector 27, and printer status information and statistics, e.g., number of pages printed, signals indicating end times of print jobs, etc.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Jan. 12, 2002

JOSEPH MANCUSO
PRIMARY EXAMINER